



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/521,882	01/19/2005	Frank Haase	TS8580US	8843

7590 09/25/2006

Jennifer D Adamson
Shell Oil Company
Intellectual Property
P O Box 2463
Houston, TX 77252-2463

EXAMINER

PRICE, CARL D

ART UNIT	PAPER NUMBER
----------	--------------

3749

DATE MAILED: 09/25/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

NT

Office Action Summary

Application No.

10/521,882

Applicant(s)

HAASE, FRANK

Examiner

CARL D. PRICE

Art Unit

3749

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 01/19/2005 (Preliminary Amendment).
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-13 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>01/19/2005</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

The claimed invention recited in claims 1-13 is directed to non-statutory subject matter. These claim to be an improper definition of a process. *Clinical Products Ltd. v. Brenner*, 255 F. Supp. 131, 149 USPQ 475 (D.D.C. 1966), the district court held the following claim was definite, but that it was not a proper process claim under 35 U.S.C. 101: "The use of a sustained release therapeutic agent in the body of ephedrine absorbed upon polystyrene sulfonic acid." Although a claim should be interpreted in light of the specification disclosure, it is generally considered improper to read limitations contained in the specification into the claims. See *In re Prater*, 415 F.2d 1393, 162 USPQ 541 (CCPA 1969) and *In re Winkhaus*, 527 F.2d 637, 188 USPQ 129 (CCPA 1975), which discuss the premise that one cannot rely on the specification to impart limitations to the claim that are not recited in the claim. See **2173.05(q)**.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims **1-13** are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. It is unclear what structure would necessarily make up a "blue flame" burner. It is generally considered improper to read limitations contained in the specification into the claims. See *In re Prater*, 415 F.2d 1393, 162 USPQ 541 (CCPA 1969) and *In re Winkhaus*, 527 F.2d 637,

Art Unit: 3749

188 USPQ 129 (CCPA 1975), which discuss the premise that one cannot rely on the specification to impart limitations to the claim that are not recited in the claim. And, claims 1-13 held to be indefinite because it merely recites a use without any active, positive steps delimiting how this use is actually practiced. Ex parte Erlich, 3 USPQ2d 1011 (Bd. Pat. App. & Inter. 1986).

Claims 2 and 3 are vague and indefinite since it is not clear to what aspect of the invention the recitation "lambda" refers.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

Art Unit: 3749

Claims 1, 5, 6 and 7 are rejected under 35 U.S.C. 102(b) as being anticipated by US005378348 (Davis et al).

US005378348 (Davis et al) discloses a process for operating a blue flame burner comprising: burning a Fischer-Tropsch derived fuel which "boils", or has a boiling point, between 160 degrees C and 400 degrees C (320°/500° F: i.e. - 160°/260° C) in the burner of a jet engine (see column 1, lines 41-64) when used as a jet fuel to obtain flue gases and a flame. With regard to claim 5, when used in the burner of a jet engine the space about the exit of the engine is necessarily heated, therefore US005378348 (Davis et al) meets the broadly stated limitation of "heating a space directly with the flue gases".

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 1-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Suppes et al (Compression-Ignition Fuel Properties of Fischer-Tropsch Syncrude, Ind. Eng. Chem. Res. 1998, 37 2029-2038) in view of US004764266 (Chen et al).

Suppes et al (Compression-Ignition Fuel Properties of Fischer-Tropsch Syncrude, Ind. Eng. Chem. Res. 1998, 37 2029-2038) discloses burning light Fischer-Tropsch fuels or Syncrude

Art Unit: 3749

(see page 2030, column 1, lines 27-36) in combustion apparatus such as internal combustion engines, as a suitable alternative to diesel and gasoline fuels (see page 2031, column 2, lines 4-35) in for example conventional diesel engines. Known light Fischer-Tropsch fuels disclosed by **Suppes et al** include the following properties:

- > 70% Fischer-Tropsch syncrude(see page 2031, column 2, lines 4-35), or 90% (by mass) of the light syncrude composition (see page 2029, column 2, lines 1-4);
- near-zero aromatic contents; and
- a boiling point of 170.6-314.9° C (Table 1).

US004764266 (Chen et al) discloses a process for using or burning middle distillate Fischer-Tropsch derived fuel having typically boiling in the 165.degree. to 345.degree. C. (about 330.degree. to 650.degree. F.) with lesser proportions of naphtha as a “home heating oil” (see column 10, line 16-34). This middle distillate fraction is, however, relatively low in sulfur and generally meets product specifications for use as a light fuel oil, e.g. home heating oil, diesel and jet fuels. In this regard Official Notice is taken that it is well known to burn “home heating oil” in combustion apparatus associated with boiler apparatus for heating homes. The combustion apparatus in these home heaters being known to be of the type which producing blue flames. **US004764266 (Chen et al)** acknowledges the presence of non-mineral fractions, or additives, in the Fischer-Tropsch distillate (e.g. – unconverted fractions).

In regard to claims 1-13, for the purpose for providing an alternative fuel for conventional home heating systems, it would have been obvious to a person having ordinary skill in the art to operate home heating systems including blue flame producing burners with Fischer-Tropsch fuel having additives and low aromatic and sulfur content and a density similar to that of home heating fuels (i.e. – between 0.65 and 0.8 g/cm³ at 15° C), in view of the teaching of the **US004764266 (Chen et al)**.

Art Unit: 3749

In regard to claims 13-15, Official Notice is taken that it is well known to provide liquid fuels with odor or aroma (see for example US001944175) and color markers (See for example US005560855), and blue flame coloring additives, for the purpose of aiding in readily identifying the fuel, and for aiding in making the flame visible (see for example US2002/0090585 or US006488726). Thus, in view of that which is well known in the art and for the known purpose, it would have been obvious to a person having ordinary skill in the art to modify the **Suppes et al** fuel to include odor and color markers.

In regard to claims 2, 3, 11 and 15-13, since the 1) “lambda” (assumed for the sake of examination to refer to the ratio of an oxidant to fuel necessary for combustion), 2) the number of burner operations per hour, and 3) the type of flame detector used to detect the burner flame, would necessarily depend on numerous design concerns such as the operational characteristics of a given burner and heating system installation and the type of oxidant being used, and would necessarily and predictably result from optimization of a given burner and heating system installation, the claimed “lambda” values can be viewed as nothing more than merely a matter of choice in design and/or a result-effective variable, i.e., a variable which achieves a recognized result. Generally, differences in concentration or temperature will not support the patentability of subject matter encompassed by the prior art unless there is evidence indicating such concentration or temperature is critical. “[W]here the general conditions of a claim are disclosed in the prior art, it is not inventive to discover the optimum or workable ranges by routine experimentation.” *In re Aller*, 220 F.2d 454, 456, 105 USPQ 233, 235 (CCPA 1955).

Double Patenting

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the “right to exclude” granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re*

Art Unit: 3749

Vogel, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 1-13 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-17 of copending Application No.

10/521517 in view of that which is well known regarding flame coloring. Official Notice is taken that it is well known to provide liquid fuels with odor or aroma (see for example US001944175) and color markers (See for example US005560855), and blue flame coloring additives, for the purpose of aiding in readily identifying the fuel, and for aiding in making the flame visible (see for example US2002/0090585 or US006488726). Thus, in view of that which is well known in the art and for the known purpose, it would have been obvious to a person having ordinary skill in the art to modify the 10/521517 fuels to include blue flame color markers.

This is a provisional obviousness-type double patenting rejection.

Claims 1-13 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-11 of copending Application No.

10/521,700 in view of that which is well known regarding flame coloring. Official Notice is taken that it is well known to provide liquid fuels with odor or aroma (see for example US001944175) and color markers (See for example US005560855), and blue flame coloring additives, for the purpose of aiding in readily identifying the fuel, and for aiding in making the flame visible (see for example US2002/0090585 or US006488726). Thus, in view of that which is well known in the art and for the known purpose, it would have been obvious to a person having ordinary skill in the art to modify the 10/521,700 fuel to include blue flame color markers.

This is a provisional obviousness-type double patenting rejection.

Art Unit: 3749

Claims 1-13 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-11 of copending Application No. **10/521,378** in view of that which is well known regarding flame coloring. Official Notice is taken that it is well known to provide liquid fuels with odor or aroma (see for example US001944175) and color markers (See for example US005560855), and blue flame coloring additives, for the purpose of aiding in readily identifying the fuel, and for aiding in making the flame visible (see for example US2002/0090585 or US006488726). Thus, in view of that which is well known in the art and for the known purpose, it would have been obvious to a person having ordinary skill in the art to modify the 10/521,378 fuel to include blue flame color markers.

This is a provisional obviousness-type double patenting rejection.

Conclusion

See the attached USPTO Form 948 for prior art made of record and not relied upon which is considered pertinent to applicant's disclosure.

USPTO CUSTOMER CONTACT INFORMATION

Any inquiry concerning this communication or earlier communications from the examiner should be directed to CARL D. PRICE whose telephone number is (571) 272-4880. The examiner can normally be reached on Monday through Friday between 6:30am-3:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ehud Gartenberg can be reached on (571) 272-4828. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 3749

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



CARL D. PRICE

Primary Examiner

Art Unit 3749

cp